Volume XXXII. JANUARY 1904 No. 1

Established in 1872 Subscription Price ONE DOLLAR A YEAR

CANADA

Medical Record

MONTREAL

A Monthly Journal of Medicine and Surgery

EDITOR

F. WAYLAND CAMPBELL, M.A., M.D., D.C.L., L.R.C.P., Lond.

CONTENTS

University of Bishop's College

FACULTY OF MEDICINE, MONTREAL

JOHN H. HAMILTON, M.A., D.C.L., Chancellor.
F. W. CAMPBELL, M.D., Dean of Faculty. J. B. MCCONNELL, M.D., Vice-Dean of Faculty.
J. M. JACK, M.D., Registrar. GEORGE FISK, M.D., Asst. Registrar.

F. W. CAMPBELL, M.A., M.D., L.R.C.P. Lond., D.C.L., Dean, Professor of Medicine, Physician to the Montreal General and Western Hospitals.
J. B. MCCONNELL, M.D., C.M., Vice-Dean, Associate Professor Practice of Medicine, Physician Western Hospital.
JAMES PERRIGO, A.M., M.D., M.R.C.S. Eng., Professor of Gynæcology, Surgeon Western Hospital.
H. L. REDDY, B.A., M.D., L.R.C.S.E., L.R.C.P. Lond., Professor of Obstetrics, Physician to Western Hospital, Physician Accoucheur Women's Hospital.
A. LAPTHORN SMITH, B.A., M.D., L.R. C.S.E., L.R.C.P. Professor of Clinical Gynæcology, Surgeon Western Hospital, Gynæcologist Montreal Dispensary.
J. T. DONALD, M.A., Professor of Chemistry.
GEO. TILLERIE ROSS, M.D., Lecturer on Laryngology and Rhinology, Laryngologist Western Hospital.
JOSEPH BEMROSE, F.C.S., Professor of Practical Chemistry.
F. R. ENGLAND, M.D., Professor of Surgery, Surgeon Western Hospital.
W. H. DRUMMOND, C.M., M.D., Professor of Medical Jurisprudence.
ANDREW MACPHAIL, B.A., M.D., C.M., M.R.C.S. Eng., L.R.C.P. Lond., Professor of Pathology and Bacteriology., Pathologist Western Hospital
ROBT. WILSON, M.D., Professor of Pharmacology and Therapeutics, Physician Western Hospital, out-patient department.
JAMES V. ANGLIN, B.A., M.D., Professor of Mental Diseases, Assistant Superintendent Protestant Hospital for the Insane, Verdun.
C. A. HEBERT, M.R.C.P., London, M.R.C.S., England, Professor of Anatomy, Temple Bldg. St. James St.
G. H. MATHEWSON, B.A., M.D., Professor of Opthalmology.

LECTURERS.

W. GRANT STEWART, B.A., M.D., C.M., Lecturer in Medicine, Physician to Western Hospital
ROLLO CAMPBELL, C.M., M.D., Lecturer on Surgery, Assistant Surgeon Western Hospital.
WILLIAM BURNETT, C.M., M.D., Lecturer in Obstetrics, Assistant Accoucher Women's Hospital.
F. J. HACKETT, C.M., M.D., Lecturer in Surgery, Assistant Surgeon Western Hospital.
C. A. HEBBERT, M.R.C.P. Lond., M.R.C.S. Eng., Lecturer in Anatomy.
A. J. RICHER, C.M., M.D., Lecturer in Medicine.
D. MCNAMARA, M.D., C.M., Lecturer in Anatomy.
W. G. REILLY, M.D., Lecturer in Anatomy, Physician Western Hospital.
JAMES M. JACK, M.D., Lecturer in Dermatology, Dermatologist to Western Hospital.
R. H. CRAIG, M.D., Lecturer in Laryngology and Rhinology, Laryngologist to Western Hospital.
C. I. SHARPE, M.D., Lecturer in Pediatrics.
R. F. RORKE, M.D., Lecturer in Histology.
GEO. FISK, M.D., Lecturer in Surgery, Asst. Surgeon Western Hospital.
GEO. HALL, M.D., Lecturer in Physiology, 584 Wellington street.
L. LABERGE, M.D., Health Officer of City of Montreal, Lecturer in Hygiene.

INSTRUCTORS.

HERBERT TATLEY, M.D., Instructor in Surgery, Asst. Surgeon Western Hospital.
J. J. BENNY, M.D., Instructor in Anæsthetics, Anæsthetist Western Hospital.
E. A. ROBERTSON, M.D., Instructor in Gynæcology, Physician Montreal Dispensary.
CHAS. C. GURD, M.D., Instructor in Gynæcology.
F. E. THOMPSON, Instructor in Obstetrics.

DEMONSTRATORS.

G. A. LACOMBE, M.D., M.P.P., Demonstrator of Anatomy, 710 St. Catherine street.
F. W. GILDAY, M.D., Demonstrator in Surgery (Orthopædics), 68 Beaver Hall Hill
I. L. HARGRAVE, B.A., M.D., Demonstrator of Anatomy, 16 St. Famille street.
H. LIGHTSTONE, M.D., Demonstrator of Anatomy.

MATRICULATION EXAMINERS.

REV. G. ABBOTT SMITH, M.A., B.D.
L. R. HOLMS, ESQ., M.A.

EXAMINER FOR WEST INDIES

REV. J. B. ELLIS, M.A., Kingston, Jamaica.

The course leading to the degree of C.M., M.D. extends over four years, and consists of four winter sessions of nine months each, beginning in October.

The Faculty of Medicine of Bishop's College aims at imparting a thoroughly practical medical education, and its facilities for doing so are in many respects unequalled in Canada. In addition to the regular course of didactic lectures, students have the advantage of extensive and varied hospital privileges.

The General Hospital, Royal Victoria, Western Hospital, Hotel Dieu Hospital and Dispensaries afford every opportunity to students of this College to receive clinical instruction in Medicine and Surgery. At the Women's Hospital special advantages are afforded for the practical study of Obstetrics.

The annual College fees are $100.

For information and copies of Annual Announcement, addres

J. M. JACK, M.D., Registrar.

CANADA
MEDICAL RECORD

JANUARY, 1904.

Original Communications.

CONTUSION WITH SYMPTOMS OF COMPRESSION OF THE BRAIN.

By P. J. Tischart, M. D., Chicago, Surgeon to Schlesinger and Mayer. Mandel Brothers, Sprague, Warner and Co., the Fair, etc.

A short time ago I was summoned to Messrs. Schlesinger and Mayer to see a man who had met with an accident a few minutes previously. He had been standing on a box near a heavy swinging door engaged in painting (not his occupation however) when some one suddenly opened the door, which, striking the box, caused him to fall and strike his head on the knob of the door. He was of average height, about 45 years of age, and weighing 175 pounds. His fellow employees informed me that he was unconscious after the fall, but when I arrived he was in a semi-conscious condition and suffering intense pain, evidently from the contusion received in the left temporal region. It was rather above the area corresponding to the center for the elevators and depressors of the angle of the mouth.

Respiration was labored and shallow; the heart weak; and the pulse at the wrist scarcely perceptible. Temperature under the axilla 98 F. The pupils responded very sluggishly. No vomiting.

Immediately after the hypodermic administration of strychnine he again gradually merged into unconsciousness. Having heard one of the employees remark that the man had been indulging in alcoholic stimulants, and, although I failed to detect its odour, a test for temulence was applied resulting in a dismissal of an alcoholic coma. Remedies were given to arouse him, and while so engaged it was found that his jaws were so firmly locked that, had it not been for the

absence of a bicuspid, administration by mouth would have been impossible. A short time later came symptoms of impending danger. Spasm of the muscles of respiration set in, and, owing to the weak and fluttered condition of the heart, his life was at a very low ebb. Artificial respiration was instituted and nitroglycerine and brandy administered hypodermically. About twenty minutes elapsed before breathing was fully restored and the patient in a favourable condition. Again administered remedies to arouse him, but was foiled in the attempt. About two hours later, when his heart permitted, an ambulance was called, which conveyed him to a nearby hospital. His home having been in one of the suburban towns, it was not considered advisable to move him that distance. A few minutes after he was placed in bed he, opened his eyes, and, looking about him rather frightened inquired of his whereabouts. I could scarcely understand him as his jaws were still firmly locked, and when asked to open them he was utterly unable. He was ignorant of all that had transpired from the time he fell until that moment.

He complained of a soreness in the region of the contusion, of a peculiar sensation at the angles of the jaws and of great weakness. A thorough examination by the hospital physician and myself revealed but little. There was spasm of the two maseter muscles, and aside from that he was apparently normal. He was able to swallow, without difficulty, some water that had been given him. The temperature was normal; the respiration, although somewhat shallow, was regaining its normal power; the pulse, though small, had gained some force and was resuming its normal rate. Neither was there anything in any of the reflexes that exhibited an abnormal condition, with the exception of the pupils which responded very sluggishly.

Operatic interference was postponed on account of his then favourable condition. Aside from some tonic medication, chloral hydrate was the principal drug prescribed and with very gratifying results. At the end of the second day

he was able to open his mouth to the extent of nearly an inch; and at the week he was dismissed, again having almost normal control of his jaws.

OTITIS MEDIA PURULENTA.

By J. H. Driver, M. D., Dequeen, Ark.

My theme for consideration is an important one. I do not feel equal to the emergency; however, I hope to say something that may interest my readers. I feel and know from experience that there is no disease that the general practitioner is called to treat that baffles the skill more than this; in fact, I think that this class of diseases should be treated by the specialist who is better prepared and equipped to meet the exigency of the case.

I shall be brief in my attempt to describe the points in detail. In the middle ear suppuration the exudate has been contaminated through the influence of micro-organisms, pus producing germs; therefore we have a purulent inflammation to deal with. In most of these cases the inflammation and congestion is so intense that the auricle becomes closed, therefore, a closed sack of germ laden pus from which there is practically no drainage whatever. The mastoid cells and middle ear have an intimate relation through a continuation of the serous membranes; therefore, it is readily understood why the mastoidial structures become involved in some cases simultaneously with the middle ear-infection, especially if there is no drainage, which increases the intensity of the inflammation by damming up the discharges. In this stage there is intense suffering which calls for radical and prompt antiphlogistic remedies.

If the drum membranes have not yet ruptured, the proper course to pursue is to make a free incision in the tympanum for the perfect drainage of the pent up inflammatory exudate; this will have a very salutary effect and greatly comfort the patient. In addition, hot applications, irriga-

tions, purgations, febrifuges, if any fever is present, will be in order. In the first or acute stages this treatment will abort a liberal per cent. of the cases. Drainage is important and must be kept up till the discharges are suppressed. Bichloride of mercury solution (1-1000) is potent in my hands as a solution for irrigation, administered by the physician. The habit of trusting to the patient instruments and medicines of whose use they have no knowledge I consider bad taste and practice. It is fraught with danger, as every posted doctor knows. After irrigating and cleansing the parts the excess of moisture should be removed with absorbent cotton. My rule is then to treat the auricle and deeper parts as best I I can with vitogen, by means of an insufflator. Vitogen is a fine impalpable powder, unirritating, equal to iodoform as a germicide, and minus the disagreeable odour of the latter. I also use this powder for indolent ulcers on any portion of the body and find it efficient in every instance where indicated. After insulation, pack the auricle with medicated gauze which facilitates drainage. If the above abbreviated treatment does not cure in five or six weeks we can reasonably anticipate mastoid extension of the malady. I have for several years advised mastoidal operations, and in every case, when I had co-operation and consent of the friends and patient, have invariably met with success. I believe that acute cases which are inclined to be unyielding to treatment and run a precarious course of five or six weeks should be promptly operated on. My experience justifies the statement. In cases having all the subjective symptoms of pus in the cells and antrum, but on cutting down to the cells and finding no pus or necrosis whatever, nevertheless the relief and recovery following this course of curetting convinces me beyond doubt to be rational and potent for good in all this class, and should be done without needless delay or hesitation. If the operation is performed under strict asepsis, no danger supervenes, nor should be anticipated.

Selected Articles.

TREATMENT OF ASTHMA AND TUBERCULOSIS BY THE INTRAVENOUS USE OF THE FRALICK FLUID.*

BY FRANK C. WILSON, M. D., Professor of Chest Diseases and Physical Diagnosis, Hospital College of Medicine, Louisville, Ky.

In October, 1902, I was consulted by an unmarried lady who complained of a troublesome cough and considerable muco-purulent expectoration. She had some elevation of temperature every afternoon, and had lost flesh and strength, though she had no night-sweats.

A physical examination of the chest disclosed a small area of consolidation at the apex of the left lung, as evidenced by a slight dullness upon percussion, increased vocal fremitus and resonance; a few moist râles could also be detected upon auscultation. A miscroscopic examination of the sputum disclosed a few tubercular bacilli. The diagnosis was therefore made of incipient tuberculosis complicated with asthma, as her history showed that she had distinct recurring attacks or paroxysma of asthma.

As the diagnosis was clear and unmistakable, she readily consented to take the Fralick treatment. October 10 twelve ounces of the Fralick fluid were given by infusion into a superficial vein in the forearm. No discomfort or pain was caused by its entrance into the circulation. On the second day after the infusion she left the infirmary and returned to her home. At intervals I received reports from her, detailing a steady improvement, lessened cough and expectoration, disappearance of fever, and gain in weight and strength; the appetite also increased, and she was sleeping well.

In April she presented herself again for examination. In examining her I found great difficulty in detecting at all the area of dullness at the apex of the left lung, there being only a very slight elevation of pitch of the percussion note.

* Read before the Brashear Medical Society, Taylorsville, Ky., October 20, 1903.

She had so little cough that I found I could scarcely secure enough expectoration to examine microscopically. In the examination I found no tubercular bacilli. I applied the tuberculin test in gradually increasing doses for three days without reaction. I then sent her home as cured. A recent report from her states that her steady improvement has continued, and furthermore, that she has not had a paroxysm of asthma since the intravenous infusion was given.

In order to test the efficiency of the intravenous infusion in the treatment of asthma, I selected at my chest clinic in the Hospital College of Medicine a very severe case, an old man who for many years past had suffered from nasal catarrh and frequently recurring asthmatic paroxysms. He was given fourteen ounces of the Fralick fluid. Now, two months later, he reports that while he still has a few paroxysms, they are much less frequent, lighter and shorter in duration. In all probability another treatment will produce a complete cure.

How this result is brought about in the case of asthma is difficult to explain. The Fralick fluid, whose active ingredients are nascent chlorine and ozone, in a vehicle made to harmonize as nearly as possible with the normal blood serum, is a germicide of great power, being able to destroy the tubercular bacillus in thirty seconds and the anthrax bacillus in five minutes. Yet it can be injected into the circulation to the extent of twelve to sixteen ounces without creating disturbance. Whether in benefiting asthma it does so by destroying some hitherto undiscovered germ is a question. That it will destroy the tubercular bacillus whenever reached is indisputable. In the treatment of incipent tubercular cases, where only a small amount of lung is infected, a single infusion will often eradicate completely every trace of the disease. Where the disease is more advanced—a large area of the lung involved, the tissue broken down, and cavities formed—it can not be expected that a single infusion of the germicidal fluid thrown into the circulation will be able to penetrate every portion of the infected area; consequently, in the course of time, the undisturbed colonies will begin to multiply and spread and reinfect the neighbouring tissues. The constitutional symptoms will return and the cough and expectoration again increase. Just as soon as these symptoms manifest themselves a second infusion should

be given, usually in three or four weeks; and this will be followed by a still more marked improvement than at the first. If this improvement steadily continues, it indicates that every portion of the infected area has at length been reached and all the bacilli destroyed; if not, a third, or even a fourth infusion, may be necessary. In this way, if each relapse is followed by a fresh infusion, even many of the more advanced cases may be cured, or at least life greatly prolonged.

If there is profuse expectoration teeming with tubercular bacilli, together with the streptococci, I follow the venous infusion with the inhalation of a combination of formaldehyde, eucalyptol, terebene, and carbolic acid in alcohol sufficient to make a clear mixture. This combination I have used for a number of years with marked benefit. I can recall one case where after an attack of pleuro-pneumonia, followed by a tubercular infection, the expectoration of a muco-purulent fluid averaged almost a pint each twenty-four hours. As a result of the frequent, deep inhalations of the combination above mentioned the expectoration in four or five days ceased almost entirely and the patient made a complete recovery, living for a number of years in good health and dying at last (quite recently) from other causes.

My experience with the intravenous method of treatment of tuberculosis leads me to the conclusion that in it we have a most valuable means of combating the disease, especially in its early stages, when it rarely if ever fails to cure. And here let me earnestly emphasize the paramount importance of the careful study of the earlier manifestations of tuberculosis, both physical and rational, so that in its most incipient stages it may be recognized and dealt with properly, actively and judiciously. The failure to do this causes the loss of much valuable time, and often costs the patient long months, even years, of suffering, and most likely the final loss of life itself, for while the physician hesitates or makes a mistaken diagnosis and the patient is lulled into a false security, the germs are busily multiplying and sending out colonies until the insignificant point at first occupied by them has extended throughout the first and into the second lung.

I have been led to the study of the action of the Fralick fluid on asthma by observing it in cases where it appeared in conjunction with tuberculosis. Later, I tried it on cases where asthma without tuberculosis was evidenced, as in the

case mentioned above. Thus far results have gone to prove it equally efficient in the one as the other. Moreover, I believe there is still much undeveloped power in it; that in time a number of other diseases will possibly yield to its efficacy as a germicide.—*American Practitioner.*

HOW SHOULD A MODERN CITY PROTECT ITS WATER SUPPLY.

By Charles O'Donovan, M.D., Baltimore.

One of the chief problems of modern sanitary engineering is to supply to a municipality an abundance of pure water, sufficient for all immediate purposes, and still able to withstand the stress of varying and unpropitious weather conditions. It is the last half of the above proposition that causes most of the attendant anxiety. The daily amount required by a given number of consumers is capable of easy calculation within limits not widely separated. The element of uncertainty is the supply as it is so readily affected by a multitude of different agencies, sometimes similar in origin, sometimes arising from causes diametrically opposite. A prolonged spell of dry weather or a severe flood in the watershed may equally reduce the available supply; the growth of aquatic plants in sluggish streams, in the appearance of bacteria of sewerage after heavy rains, may render water unfit for drinking. So that when a city proposes, as most cities do, to furnish its inhabitants with water, it should so select the sources of its supply that purity and sufficiency of water shall be undoubted. But this is not all; cities grow in population, so that each year an increasing amount will be required of the supply, and also in the growth of population there is a constant tendency to spread out into suburban development. This has become more and more evident since the general introduction of electric passenger transportation, so that at present every considerable city is surrounded by a more or less densely populated area of village growth, bringing with it as an inevitable consequence the polution of the water courses which drain those areas. This has led to large engineering projects, by means of which the cities have been enabled to give up nearby

sources of water supply, and have, always at very considerable cost, sought for the fresh supplies of greater volume and purity in streams or rivers draining large areas of country, and so far removed from suburban development as to avoid that source of contamination. At the time that such selection is made this move is usually satisfactory, but this happy state of affairs does not last for ever. In some cases the forests of the water-shed are felled and the land is taken up for farming purposes, changing a fairly constant flow of pure water into a reduced supply in dry weather, varied by a flood of liquid mud after each rainstorm; in other cases the manufacturer notes the water power going to waste from his point of view, and is led to establish a mill of greater or less size on the source of supply, around which soon appears a village, sometimes a town, from which empties into the stream with each heavy rain whatever filth may have accumulated in its streets or yards. It takes but a few years of such fouling, or a few months if the mill towns become populous or numerous, to produce among the citizens who, miles below, drink the diluted sewerage any of the diseases that are water-borne and which may exist in the trespassing towns. The next move on the part of the municipality under consideration is the establishment of an elaborate filtration plant to purify water that should never have been allowed to become contaminated but should have been jealously guarded against impurity, by the users for their own sake and to be handed down to their descendants, to whom is left the task of paying the bonded indebtedness incurred in the introduction of the water supply. Can it be a matter of surprise if the succeeding generations fail to appreciate the good sense of their forefathers, who have shown such utter lack of civic wisdom by saddling them with a debt which produced water that might have been all-sufficient, but which through gross neglect had become so filthy as to require subsequent filtration? We have a nearby example of this utter disregard of the future in the experience of the citizens of Baltimore, who having found that their former supplies were becoming insufficient and contaminated, introduced, at considerable cost, a new and adequate supply from the Gunpowder river, spending in the course of this improvement thousands of dollars for the purchase of water rights, for

which it is commonly believed more money was frequently paid than the absolute value of the farms to which the water rights pertained, instead of buying outright the adjacent land, and so securing absolutely what becomes, and often has become, a source of pollution to the affluent streams. The contamination to be feared and guarded against in municipal water supplies is twofold—bacterial or alluvial, the former appearing as the result of decomposition of animal or vegetable matter, or from drainage into the watercourses of privy or barnyard overflow, the latter being collectively the great mass of waste brought down by rains from plowed fields or decaying forests, with parts of fences or haystacks added, according to the severity of the storm producing the flood. While from the standpoint of the physician the first group is the one most considered in speaking of water impurities, from the standpoint of the hydraulic engineer the last is infinitely more important. So that in any proper consideration of the subject it is necessary to advert to each of these topics, and each in some way reacts upon the other as we shall see.

Bacterial contamination is easily avoidable in theory, but practically it is best avoided by careful attention to the probable results of silt contamination, for even in waters that have become polluted bacterially we find that sedimentation will eventually cause the disappearance of all germs if allowed to proceed undisturbed for a sufficiently long time. This is, in part, what is aimed at by impounding our drinking water in large reservoirs, where sedimentation takes place very thoroughly in the placid water. It is undeniable that this cannot occur if the reservoir shall have become filled with silt, so that it represents no longer millions of gallons of water in a state of quiescence, but rather a shallow stream flowing over a muddy bottom almost directly into the mains under the city streets. Another method of avoiding bacterial contamination is by a thorough system of patroling the entire water-shed so that all possible sources of pollution may be located and access of filth to the water sources may be denied. This may be carried out satisfactorily if the system is thorough and the remedies conscientiously applied. But those of us who have lived in the country, and who have so often seen in wet weather the rich but filthy ammoniacal liquor leaching from the barnyards,

no matter how protected, and pouring into the nearest rivulet know that it is impossible to protect watercourses from such contamination, especially if any villages or towns exist within the watersheds. Barnyard leachings form pollution sufficiently nauseous to think of without referring to the far more disgusting and deadly products of washed-out privy vaults. I contend strongly that the only way for a city to escape this manifest danger is by destroying utterly the source of such contamination. No mistaken idea of trade advantages, or market for the sale of its wares, or source from which a few mill-owners may gain a profit, should stand in the way of the cry of the comparatively helpless citizens for pure water. As well might a man feed tainted food to his ignorant and trusting family because it is cheap or is bought at a nearby grocer's for sake of saving a few lazy steps. The law recognizes the imperative right of a municipality to so protect itself; it is the supine inadequacy of its application and enforcement that allows such nuisances to continue. In this matter I cannot accept half measures that hypnotize us in a fatuous dream of security. I do not believe that any system of inspection can control the forces of nature and I have too often seen the cleansing effect of a heavy rain. No matter how much diluted, such filth must eventually produce evil results if used as drinking water by human beihgs. In this way several diseases are spread, notably typhoid fever and cholera, and probably dysentery and some forms of diarrhea. These are proven and accepted facts that no longer pertain to the realm of speculation. So that a city that permits the continuation of such pollution of its water supply simply invites disease to enter its doors, not innocently or ignorantly, for the note of warning has been sounded again and again by sanitarians, but culpably and with criminal negligence—a sowing of the wind that must produce the harvest of whirlwind. These sources of contamination must be removed even if it become necessary to purchase by condemnation the offending properties. This will not often be necessary, for a city can bide its time and gradually acquire the objectionable property, as in the course of time it is offered for sale. Land is sold very frequently in our country, and a patient and wealthy purchaser can slowly but surely eliminate the plague spots from its surroundings at prices but little above the actual value of the land. In cases where factories

have produced villages, usually very dangerous localities, a stringent application of the laws safeguarding the water supplies may render it expedient for the corporation of the factory to sell out to the corporation of the city and remove to a locality more salubrious for both. At first sight this may savour of hardship, but the immense interest at stake on one side makes the small invested capital of the other dwindle into insignificance.

But what of the alluvial contamination? Can that be remedied in any way? This is indeed a more serious problem in both aspects, for this not only contaminates the water supply, but it soon fills up the reservoirs and so reduces almost to nothing the impounded water upon which reliance is placed in times of prolonged dry weather, so that a system of reservoirs whose capacity may be represented on paper by billions of gallons may contain actually only a hundredth part of these enormous figures, even when apparently full. The shoaling has gone on at the bottom, hidden under the water, and is discovered by the indignant taxpayer only when he receives notice in August to be careful not to waste too much water. It must be remembered that rainfall is distributed very unevenly during the year. When we need least water most is sent, and when we are hot and dry and dusty we get least; nor is that all, from the water engineer's point of view, for what we do get in summer is most apt to come in violent storms which tear up the earth of cultivated fields and overthrow trees and fences, so that the water that is delivered at the impounding dam to be turned into the city supply is fit only to be allowed to escape through the sluices, because it is liquid mud mixed with debris rather than water that is desirable. After such storms it requires often a week before the water becomes clear enough to be sent to the reservoirs, but during this time the city consumption goes on regularly, and it requires but little thought to see how near to a water famine a very dry spell of weather or a succession of severe storms may reduce a municipality.

As a remedy for this condition of things I believe that the modern, progressive, expanding city should have recourse to very extensive purchases of property throughout the water-shed. This may seem a large proposition, but we are at present dealing with large propositions. No American city considers itself completed; each hopes and fully expects to

grow in population and importance to an indefinite degree. No man can foretell the size to which we may attain. But no matter what may be the growth of a city, one of its chief needs must be always pure water in quantities that must increase as population increases. Why, then, should we hesitate to look squarely at the problem or fear to offer the true solution because of its apparently heavy cost? Land purchase need not be made all at once. Conditions that have been endured thus far may be gradually ameliorated, making the burden lighter by extending the period of payment. Fortunately for us who have to bear the burden, the land that should be acquired first is that which is of least value intrinsically—the steep hillsides that are annually plowed by the patient farmer, evidently as a pastime, for his efforts to raise any crops upon them must necessarily result in loss. With every storm his seed and fertilizer, together with about six inches of the surface soil, are washed into the valley streams and thence on to the primary reservoir, there to be deposited by sedimentation, reducing by so much its capacity. Such land is in the market for sale every day, and naturally at very moderate terms. It is practically useless to the farmer, but in proper hands and scientifically treated it would be very valuable as a part of a water supply. Let such waste, bare hillsides be clothed with forests, and mark the difference. The winter snows melt slowly, sinking into the porous soil to saturate it to repletion, and reappear gradually in crystal rivulets from numerous springs; the rains of summer no longer dash against bare and unprotected soil, furrowing it with great ravines and washing it into the valleys, but falling through the luxuriant foliage upon the moss-covered earth, repeat what had occurred during the winter's thaws, sinking into the ground to replenish the unfailing springs. So that what was useless is eaily converted by Nature's own process of timber growth into a source of comfort to thousands. But the gain need not cease here. The science of forestry is only in its infancy in this country, but already we know that in the forests that may be planted upon such reclaimed waste-places, by the proper application of the principles of forestry, most excellent preserves may be created, easily accessible to the centers of consumption, taking the place of former tracts of timber land wantonly destroyed. I venture to predict that such reservations, parks in part,

water sources in chief, will in the future rank amongst the most valuable and productive assets of civic investment. The disappearance of our forests is everywhere lamented, and is already so serious that great national forest reservations have been created by congressional enactment about the sources of many interior rivers, chiefly with a view to irrigation. My proposal is exactly similar on a smaller scale and for purposes of water supply to cities. Having destroyed the filthy factory village and clothed with deep foliage the barren hillsides, the process of acquiring land should be gradually extended throughout the water-shed. Having ascertained by topographical survey the most desirable acquisitions or the most objectionable features, the additional purchases should be made accordingly. Rolling country could be converted into pasture lands and meadows cropped in grass. Many farms need not be acquired at all because of absence of silting from level lands. These great pastures and meadows would afford sustenance to vast herds of cattle from which could be drawn a large portion of the city's milk supply. As they would pasture on the city property, whether they belonged to the city or were private property, paying a rental, these herds would be easily reached by city inspection and readily under city control. I foresee in this ideal condition an opportunity for an enormous improvement in the city's supply of milk. This conversion of a farming country into a land of forests and pastures would have the greatest influence upon the water supply derived therefrom. It requires no argument to convince any man that mud freshets would disappear and that very rarely would such water flow into the primary reservoir as would be unfit for immediate distribution to the storage lakes or to the city mains. The enormous waste by evaporation from unprotected surfaces would be checked, and from the woodland and the turf would come to the streams of the valleys practically all of the water that would fall from the clouds, thus vastly increasing the absolute quantity of the supply. And every drop of it would be clean. No typhoid germs, no cholera or dysentery would be lurking in the limpid streams, but an abundance of sweet water would constantly flow from the city's own magnificent domain.—*Maryland Medical Journal.*

Progress of Medical Science.

MEDICINE AND NEUROLOGY.

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine University of Bishop's College; Physician Western Hospital.

THE TREATMENT OF EXOPHTHALMIC GOITRE.

By CHARLES W. McINTYRE, M.D.

Consulting Physician to St. Edward's Hospital, Secretary of Floyd County Board of Health, etc., New Albany, Ind.

In the treatment of goitrous patients two indications present themselves: The first concerns us with such therapeutic measures as are indicated to meet the symptoms. The second indication comprehends the means at the disposal of the physician for bringing about resolution in the thyroid gland.

Moderate exercise is indicated and essential, but when this is overdone the patient is made worse. These patients should avoid lifting or the carrying of heavy weights. When the patient is anæmic some eligible preparation of iron is indicated and should be employed.

Very often goitrous patients have an extreme degree of nervousness. In instances of this character we should give the bromides in such quantities as will bring relief. Often valerian will answer this purpose admirably.

Digitalis and strophanthus may be required to regulate the heart's action. It is well, however, not to rely too implicitly on these drugs. They are often most prejudicial, and rarely can they be relied upon.

To establish resolution no remedy has found such favour with the profession as iodine. Thyroid extract has been tried, but its employment on a large scale has not justified the belief that it is more valuable than iodine. In fact, the preference is given to iodine by the great mass of the pro-

fession, and the evidence in its favour may now be said to be overwhelming.

Much prejudice has, however, been engendered against iodine because we have not always seen it exhibited in a form that will insure its action and still avoid its unpleasant effects.

I have for some time employed Burnham's soluble iodine, this being a non-irritating, free iodine that is readily soluble in the gastric juices, and which enters the system unchanged. I prefer this preparation to the iodide of potassium and other similar agents for the above reason and because its action is more certain. To 1 or 2 drachms of Burnham's soluble iodine enough water or simple syrup is added to make 8 ounces. Of this a teaspoonful is to be taken three or four times daily until the enlargement of the thyroid has disappeared.

In cases seen early we shall have the pleasure of obtaining good results if the treatment is persevered in by our patient. Of course, this statement does not apply to those patients whose physical condition is below par to a decided extent or who have some associated disease.

Case I.—M. S., aged 13. This girl came to me for treatment of goitre. Her thyroid gland was considerably enlarged, but she had no appreciable nervousness nor cardiac distress. I told the mother that I thought she would get well and recover perfectly if she would take the treatment. She was accordingly put on iodine in the manner already described. She took a teaspoonful an hour before meals. She persevered in the employment of the remedy for four months, at the end of which time she was well. She did not have iodism at any time.

Case II.—Mrs. S. Q., aged 29. This lady had a goitre of appreciable size developing, and she was in the greatest distress of mind as to its possible outcome. She also was put on Burnham's soluble iodine and made a complete recovery in three months. She did not experience any gastric or other untoward effect from the treatment.

Case III.—Mr. J., aged 20. This young man was of a nervous temperament, and now had a goitre that had grown to such size as to make its presence visible. He was very nervous and was low spirited. He was given valerian and bromides to allay his nervousness, and Burnham's soluble iodine was taken for four months. This patient also recovered entirely.—*Med. Bulletin.*

THE TREATMENT OF TONSILLITIS.

There have recently appeared a number of articles upon the treatment of tonsillitis, advocating in the follicular variety of the disease the time-honoured treatment of acetanilid or salicylic acid, together with gargles containing some antiseptic, with a suggestion that the spray can be advantageously used. It is surprising that the importance of emptying the follicles is not emphasized in all writings upon the treatment of the follicular variety of tonsillitis. The crypts are filled with a mucoid débris containing large numbers of bacteria, the local reaction depending upon the number of follicles involved. Gargles are of doubtful utility, as they do not bathe the tonsil, and in any event they cannot reach the bottom of the follicle and influence the local pathological process. It is necessary in such cases to follow the rule that is employed in the treatment of acne—to empty and disinfect the follicle.

This may be accomplished in several ways. A simple method is to expose the tonsil in a good light, and insert into each follicle a small curette, cleaning it out and subsequently applying peroxide of hydrogen, or a strong antiseptic. Quite as efficient a method, and very much more simple, is to squeeze the tonsil against the side of the pharynx, the force to be exerted from above downward, and is made very firmly; in this way the accumulated secretions in the crypt are expressed and there is effected a rapid cure of the disease. The best instrument for this purpose is the finger, pressed firmly upon the base of the tonsil and rapidly brought down to its apex, strong pressure being exerted. The manoeuvre is somewhat painful, but it is momentary, and the relief is usually immediate. In case the finger is not employed, the bowl of a spoon will answer the same purpose.

This method has been referred to in medicine, but it seems to attract little notice, even among those who devote special attention to treatment of the throat.—*Medicine.*

TREATMENT OF PARALYSIS AGITANS.

In the whole domain of medicine there is no more intractable affection than paralysis agitans. Medicinal and hygienic measures, while ameliorating in some degree the

unfortunate condition of these sufferers, have afforded very little relief. The work of Taylor has especial interest, as he claims to have obtained favourable results from systematized movements. In his last communication he refers to the difficulty of keeping close records of individual cases, as the treatment must extend over a long time, and in some cases it is difficult to obtain the active co-operation and persistence in the treatment necessary for success.

Treatment is addressed to overcoming the stiffness, and to restoring the co-ordinating power of the limbs. The writer has seen only one case of paralysis agitans in which the patient retained nearly full muscular vigour and functional capacity. Systematized movements rapidly and satisfactorily bring back co-ordinative and muscular power, and also exercise a beneficial effect upon circulation and vegetative functions. According to the writer's experience, the greatest vigour is found in those cases which exhibit the most marked tremor. In three patients with little tremor there was such pronounced physical weakness that only the simplest passive movements could be used.

The central idea of the treatment is to break up the adhesions in the muscles, and to give the joints their widest possible excursion. This is accomplished by passive and active movements, especial attention being given to the shoulders and upper part of the body, which are usually most affected. In overcoming the rigidity of the back, dry cupping is of use. By the aid of these movements the growing apathy of the patient is overcome, as the elasticity of the tissues is restored.

It is not claimed that a cure is obtained by these measures, but an improvement is reached in many severe cases.—J. M. Taylor in *Proceedings of Philad. Co. Med. Soc. Medicine.*

A NEW METHOD OF TREATING THE DECLINING STAGE OF ACUTE URETHRITIS.

Chronic anterior urethritis often follows too protracted and energetic treatment in the early stages of the disorder. The underlying pathological condition is a follicular inflammation, with a thickened mucous membrane. It may involve only a portion of the canal, or be quite extensive. There is

sometimes a hyperplasia of the epithelial layer, associated with an increase in the capillary vessels, known as granular urethritis. Erosions and ulcerations of the urethra are not an infrequent cause of this condition. As a rule the obvious discharge is confined to the early morning, and is generally of greenish white colour. These cases of chronic anterior urethritis are rebellious to treatment. Hundreds of remedies have been vaunted in their management.

The writer does not offer a new drug, but a method of treatment which has been serviceable to him in the management of obstinate cases during the past five years. He cannot give statistics, as the method was employed symptomatically to meet special indications, rather than in a routine manner. The method consists in using a glass insufflator so perforated that when powder is placed within it, it can be introduced into the urethra, and as it is withdrawn the powder is distributed over the surface of the urethra. The instrument is readily sterilized.

The drugs used are astringents and antiseptics. If there is much pus, aristol is used before applying an astringent. This method is only to be used in chronic anterior urethritis, and in the declining stages of an acute condition; under no circumstances in the early stages. The method is regarded as far superior to the ordinary injections, as the instrument separates the urethral folds, and deposits the remedy over the diseased area.—W. W. Townsend, *Am. Med.*

ACETOZONE IN THE TREATMENT OF FIFTY-THREE CASES OF TYPHOID FEVER.

The writer gives an account of fifty-three cases of typhoid fever in which acetozone was used. All of the patients recovered, many of them seeming to be of more than average severity, both from the length of time they were in the hospital and from the associated complications. As a result of their experience the writers come to the conclusion that acetozone is a valuable intestinal antiseptic and appears to lessen the tympanites and diarrhœa, especially when it is begun early in the disease and continued until convalescence is well established. Under its influence the stools are less offensive. In most cases their colour and con-

sistency are not altered. Acetozone does not act upon the heart or respiratory organs, nor has it any appreciable effect on the kidneys. Hyperpyrexia is rare in cases in which it is used. Relapses are also infrequent where the drug is continued until convalescence is fully established.—D. F. Wood and M. C. Thrush, *Therap. Gaz.*

IMPROVED CARBOLIC ACID TREATMENT FOR HYDROCELE.

J. A. Bodine reported to the New York Academy of Medicine, February 28, 1903 (*Medical News*, March 21, 1903), an improvement on the carbolic acid treatment for hydrocele. This consists in running a stream of salt solution through the hydrocele sac until the escaping fluid contains no albumin. In this way the inner surface of the tunica vaginalis is mechanically cleansed of its albuminous coating, permitting the carbolic acid to come in contact with the endothelium. Carbolic acid and albumin are chemically incompatible. Hydrocele fluid and carbolic acid form a thick, yellowish-white precipitate. To facilitate removal of of all of the fluid and the washing of the tunica vaginalis, a trocar of sufficient length to accommodate two cannulæ is used. A point at the lowest level of the tumour is cocainized and the trocar introduced, its point carefully guided to the upper pole of the tumour, and pushed through. The trocar is then withdrawn, leaving the cannulæ in position. The rubber tube of an irrigator containing warm salt solution is attached to the lower cannula, and the fluid permitted to escape from the upper. In some cases as much as half a gallon of the salt solution is passed through the sac before the albumin is removed. After this the sac is completely emptied of the salt solution, and from one to two drachms of Calvert's liquefied crystals of carbolic acid introduced through the lower cannula by means of an ordinary hypodermic syringe. The sac is then manipulated so as to bring the acid in contact with all parts of the membrane, after which the irrigation is again employed until the excess of carbolic acid has been removed. In this way there is no excess of acid left in the sac, consequently there is no danger of carbolic acid poisoning. In using full-strength carbolic acid, the mouths of the lymphatics are at once sealed and absorption is prevented.

THE HYDRIATIC MANAGEMENT OF FEVERS.

Nothing is of more importance in hydriatic treatment than the manner in which it is applied; indeed, it is the proper carrying out of the details of the method that makes the difference between success and failure. The statement that the patient could not endure cold baths is meaningless in the absence of a statement as to how they were administered. Baruch publishes the following notes in reference to the hydriatic management of fevers: (1) Don't bathe in cold water to reduce fever, but to refresh the fever stricken patient.' (2) Don't permit cyanosis or chattering teeth. (3) Dont stop bathing because a patient complains of chilliness. (4) Don't raise temperature of baths on account of chilliness; shorten bath and increase friction. (5) Don't neglect friction during each cold procedure; it prevents chilling. (6) Don't disregard the fact that the Brand bath at 65° to 70° is the ideal bath for typhoid. (7) Don't use the Brand bath in a bath-room. (8) Don't give up bathing because the ideal bath is not procurable; other procedures are useful. (9) Don't use ice-coil to abdomen; it has no refreshing effect. (10) Don't lose sight of the fact that the chief aim of all cold procedures is reaction.—*Medicine.*

TREATMENT OF COLD IN THE HEAD.

The hydropathic treatment of a cold in the head is more reliable than any other. It is as follows: In the morning, after rising, and at night before retiring, wash the feet and legs as high up as the knees in cold water, then rub them with a rough towel, and massage them till the skin is red and glowing. In addition to this, cautiously snuff tepid water up the nose frequently during the day, and sip with a teaspoon a glassful as hot as can be borne an hour before each meal, and at bedtime. A few days is often quite sufficient for simple cases, and obstinate ones yield if the treatment is prolonged. No medicines are required. If taken in the first stages of the disease, a cold is broken up which might otherwise become a severe case of bronchitis, lasting many days or weeks.—*N. Y. Med. Times.*

THE CLINICAL THERMOMETER.

The clinical thermometer has become such an indispensable aid to diagnosis that it is difficult to imagine our immediate predecessors deprived of the exact information which we look to this invaluable little instrument to impart. It is with surprise that the present generation of practitioners learn as a matter of fact it did not come into general use until the "seven'ies" of last century. It did not spring into existence with the éclat and suddenness of the laryngoscope and the ophthalmoscope. No doubt the thermometer was made occasional use of here and there by practitioners of an innovating and inquiring turn of mind, but Wunderlich, in 1858, was one of the first, if not *the* first, to describe its systematic use. That it had been made use of to ascertain the temperature of the body long before is evident from the writings of Sir Isaac Newton and Benjamin Franklin, and one's surprise is only intensified at the long delay that ensued before its value in clinical medicine became known and appreciated. It was consequent upon the publication of Wunderlich's article in the *Medical Times* and *Gazette* for 1858 that Sir Samuel Wilks ordered a thermometer to be procured for use at Guy's Hospital. The clinical thermometer of those days was about a foot long, and the one just referred to was regarded as such a curiosity that it was shown at a meeting of the British Medical Association, where its appearance excited some levity.—*Medical Press and Circular.*

NUTRIENT ENEMATA.

1. Beef tea, three ounces; yolk of one raw egg; brandy one-half ounce; liquor pancreaticus, two drachms.

2. One whole raw egg; table salt, fifteen grains; peptonized milk, three ounces; brandy, one-half ounce.

3. Beef tea, two ounces; brandy, one-half ounce; cream, one-half ounce.

4. Beef tea, two ounces; one whole raw egg.

5. Beef juice, one ounce.

6. Beef essence, six ounces.

7. Whites of two raw eggs; peptonized milk, two ounces: two eggs.—*Medica Arena.*

CALCIUM SALTS IN THE TREATMENT OF URIC ACID CALCULI.

A. C. Croftan, in the *Journal of the American Medical Association* of March 28, 1903, says that the administration of calcium is of value in the removal and the prevention of deposit of uric acid calculi. It must be determined that the calculus is due to uric acid. If such is the case the best calcium preparation is the carbonate. This may be given in doses of 15 to 20 grains three times a day, though much larger doses have been recommended. A convenient form for administering calcium salts is in natural mineral waters, or these may be prepared artificially by adding the salt to some pure water. The natural mineral water of Contrexéville, Wildungen, and Fachingen contains the largest proportion of calcium salts. Personally he prefers adding the necessary amount of calcium salt or limewater to some pure water. He reports four cases of renal colic in which calcium salts were freely used, and none of them have had recurrence of the calculous disease. Von Noorden, who first recommended the calcium salts in the treatment of nephrolithiasis, reports only two recurrences out of twenty-one cases. In one the renal colic began a few days after the treatment was instituted, and in another it developed nine months afterward, but in the later cases it did not recur. The good results obtained in the writer's four cases and the statistics of Von Noorden lead him to believe that the continuous exhibition of a calcium salt is efficacious in uratic nephrolithiasis.—*Medicine.*

FRUIT.

All kinds of fruit possess remedial properties of the highest value. Nature gives us such a wide range to choose from that it is a comparatively easy matter to eat fruit every day throughout the year. A diet that always includes fruit will be found a constant protection against many ills that otherwise would be sure to make their unwelcome appearance. Indeed, the stomach will call for fruit when it rejects all else. This alone shows the high importance of eating fruit every day.—*Pacific Health Jour.*

CARDIAC HYPERTROPHY IN NEPHRITIS.

Senator (*Deutsch. med. Woch.*, January 1, 1903) returns to this unsolved question, and endeavours to explain why there is cardiac hypertrophy at all and also why it should especially affect the left ventricle. The investigations of Strauss carried out in his clinic show that there are marked differences between the blood in chronic parenchymatous and that in chronic interstitial nephritis. In the latter is found almost always an increased molecular concentration, an ordinarily normal specific gravity and albumen content, and a n increase in the nitrogenous residue (that is after precipitation of albumen), with consequent increase in the toxicity of the blood—while in the former, concentration is normal, albumen and specific gravity are lowered, and nitrogenous residue not increased. As a result of the toxic matters in the blood not eliminated on acconnt of disease in kidneys, we get changes in the blood vessels with resulting symptoms, varying according to the nature of the process in the kidney. In acute nephritis the irritative effects are most marked—the walls of the vessels very rapidly lose their tone and dropsy ensues at once, and is protective in the sense that it helps remove from the blood the irritating elements; while duration is too short to produce permanent changes in vessel wall or heart. In chronic parenchymatous nephritis the poison works more slowly, the dropsy develops later, and the toxic effect on the heart muscle is gradually shown by hypertrophy; that this hypertrophy becomes so much more marked on the left is because peripheral resistance due to diseased vessel walls is so much more an important factor in the greater circulation than in the lesser. In chronic interstitial nephritis the toxic elements accumulate much more slowly, the vessel wall does not lose its tone, dropsy develops slightly, if at all, and there ensues the gradual changes in the vessel walls and heart with same reason for a preponderance of hypertrophy of left ventricle. In this form of nephritis, however, where the initial renal insufficiency remains for a long time so slight and the consequent accumulation of poison is so slow, it is perhaps necessary to assume some toxic influence within the system independent of the kidney as a starting point for the disease.—*Boston Med. and Surg. Journal.*

SYMPTOMS AND TREATMENT OF PYELITIS IN INFANTS.

Acute pyelitis in infants is not according to Thomson (*Scottisch Medical and Surgical Journal*, July, 1902), very rare. Undiagnosed, it is an alarming illness, but under proper treatment it is a very curable one. The chief facts, apart from the examination of the urine, which suggest that a case may be one of pyelitis, are:

1. The pyrexia and the extreme distress, without any sign of organic disease in any other system sufficient to produce them.

2. The presence of rigours, especially if the patient be a child under two years, if malaria can be excluded.

3. Any local tenderness or pain on micturition serves, of course, to draw attention to the urinary tract.

The treatment in the main, consists of rendering the urine neutral by the administration of alkaline remedies as speedily as possible, and in keeping it so until all the symptoms have disappeared. When this is thoroughly carried out the pain and uneasiness vanish, and the temperature rapidly falls and remains below normal. After the pus has ceased to be present in the urine, with ordinary tonic measures the urinary tract seems able to defend itself; the organisms cease to cause trouble and in time they also doubtless disappear.

The alkaline used by Thomson is citrate of potash. In less severe cases twenty-four grains *per diem* may suffice for this purpose, but it is best to begin with thirty-six to forty-eight grains in the twenty-four hours. Although this amount of alkaline is extremely beneficial to the local conditions and rapidly allays both the pain and the fever, it always exerts a depressing action on the general system, and the child's temperature becomes subnormal; it seems flabby and nauseated, not infrequently vomits, and may have diarrhœa. No harm, however, follows this temporary depression, and the medicine should be steadily persevered with.—*Therapeutic Gazette.*

MEDICINAL TREATMENT OF GALL STONES.

H. Richardson, Baltimore (*Therapeutic Gazette*, November, 1903). It naturally suggests itself that the prophylaxis of gall-stones is the administration of glycocholate

of soda by the mouth, since it will then be absorbed from the intestine, entering the gall-bladder from the liver, and hold the cholesterine in solution. The question as to the possibility of dissoving gall-stones in situ has recently been investigated by Vaughan Harley and Wakelin Barratt (*Journal of Physiology*, 1903). They inserted large gall-stones into the gall bladders of healthy dogs with antiseptic precautions, and found that in periods from six months to one year the gall-stones had entirely disappeared, showing that the healthy bile of the dog is capable of dissolving cholesterine stones. They also inserted gall-stones into the gall-bladder, and at the same time produced cholecystitis, with the result that the gall-stones remained unaltered. Unfortunately no analysis of the bile was made in these cases, but from the work of Herter and Wakeman and the analysis of Austin it seems certain that in the cases where cholecystitis was produced there was a deficiency of bile acids, as in no other way is it possible to explain the solution of the stones in the normal bladder and their remaining undissolved when cholecystitis was present.

From the above experiments it is evident that by the administration of glycocholate of soda it must be possible to dissolve gall-stones in the bladder, and even when cholecystitis is present glycocholate of soda is indicated not only as a prophylactic but as a solvent for stones already present, and that in those cases only in which there is occlusion of the gall duct is surgical interference permissible.—*St. Louis Medical Review.*

CHRONIC NEPHRITIS WITHOUT ALBUMINURIA.

Elliot (*Medical News*, September 19, 1903), after a report of several cases, concludes as follows:

1. Latency of symptoms is so constant a characteristic of chronic interstitial nephritis as to almost constitute its most salient feature. This obscurity involves all manifestations (symptomatic, physical and urinary) and prevails throughout the entire course of the disease.

2. Latency of symptoms does not constitute a point of absolute distinction between the early and the advanced

stages, or between the mild or the severe forms of the malady.

3. Symptoms are especially liable to be absent, and urinary signs uncertain during the early stages of chronic interstitial nephritis, consequently the diagnosis during this period must generally be made from physical signs rather than from symptoms of urinary signs.

4. Albumin is absent from the urine of this form of nephritis with great frequency. It may frequently be absent during the early stages. It may occasionally be absent until the disease enters the final stages. It may rarely remain absent from the urine throughout the entire course of the disease, the urine remaining free from albumin so long as no intercurrent disturbance apart from the nephritis arises to cause it to appear. Albuminuria, therefore, constitutes a very unreliable diagnostic sign in this disease. When present, associated with physical signs and other urinary indications, it serves to complete the diagnosis, but if absent no contrary inference is justifiable, and the diagnosis must be considered without its aid.

5. More reliable evidence of renal change is a diminution in the gross amount of urinary solids, and especially significant is the presence of casts.

6. Chronic intestitial nephritis never exists as a clinically recognizable condition without the presence of casts in the urine. Although a renal diagnosis cannot be founded on casts alone, they constitute a corroborative sign of high clinical value when associated with other indications.

7. The secondary circulatory changes following chronic interstitial nephritis are so constant and characteristic as to furnish, in most cases, sufficient ground for the recognition of the disease before reference is made to the urine. The inconstancy of the urinary symptoms places them in much the same diagnostic category in chronic interstitial nephritis as that occupied by the murmur in valvular diseases of the heart. The diagnosis should be made, if possible, from the physical signs and symptoms, the urinary indications being regarded as corroborative rather than as essential evidence. —*Medical Fortnightly.*

ETHEREAL TINCTURE OF CAPSICUM IN ASTHMA.

Sir James Sawyer recommends the non-alcoholic ethereal tincture of capsicum as a good remedy for local application in subacute and chronic gout, muscular and chronic rheumatism, and in certain forms of bronchitis. He believes that the ether, in consequence of its action upon the sebaceous secretion of the skin, is preferable to alcohol in every case where it is desired to act upon or through the skin. Moreover, ether is easily mixable with turpentine and other essential oils. He recommends the following mixture as an excellent rubefacient:

℞ Ethereal Tincture of Capsicum.....
Solution of Ammonia.....
Turpentine.....
Linseed Oil..... } equal parts.

—*N. Y. Med. Jour.*

DISEASED HEARTS.

There are two periods of greatest danger in heart disease; one is at night, during those hours when the periodic distress returns, and when respiratory movements are most sluggish; the other is when, upon arising from a recumbent position, the column of blood in the upper part of the body is suddenly thrown back upon the enfeebled ventricles, thus at the same time diminishing brain-pressure.—J. M. G. Carter, M. D., Waukegan, Ill.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital

AND

GEORGE FISK, M.D.,

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital.

MODERN THERAPY OF SEPTIC PUERPERAL AND SURGICAL INFECTIONS.

Boswell Park, M. D., LL.D., Buffalo, N. Y. Professor of Surgery University of Buffalo, says (*Alpha Omega Delta Bulletin*, March, 1893), that the mo t efficient measures for the treatment of surgical infections are the various silver preparations, for whose introduction into surgical and obstetrical work we are indebted to Credé of Dresden. We have been for decades looking in vain for an effective antiseptic which is devoid of marked toxic or irritating properties. Allotropic silver (collargolum) seems to offer us the nearest approach thereto. Between this silver preparation, which is so bland, and the silver salts, like nitrate of silver, there are the lactate and citrate of silver, also introduced by Credé, of which reasonably strong solutions can be used upon quite sensitive surfaces without producing much if any disturbance.

Let us first take the aqueous solution of soluble metallic silver (collargolum), which in the strength of 1 to 500 in distilled water makes a somewhat cloudy solution. In this strength it may be used by intravenous injection in cases of severe general or puerperal sepsis, rapidly spreading gangrene, acute articular rheumatism or other serious infections. In fact, solutions as strong as 1 to 100 may be employed, it being desirable to introduce 6cg. (9. grain) to 10 cg. (1½ grains) at least. If there be difficulty in injecting it into a vein it may even be given beneath the skin. Unpleasant

effects will not be noticed, neither will any immediate relief follow, but the solution thus introduced coming into contact with the blood, which in these cases is swarming with germs, will promptly begin its bactericidal work, whose effects should be manifested after two or three hours by a fall of temperature and amelioration of septic symptoms. Silver used in this way has been of great service in cases of carbuncle and even of acute anthrax. Moreover, its administration may be repeated as often as may seem necessary.

When metallic silver is made into a suitable ointment (unguentum Credé), which, by the way, much resembles mercurial ointment, and is then applied to the skin, there is a rapid absorption of the silver itself with its dissemination into the blood stream and results like those just mentioned.

It is simply a somewhat slower method of introducing it into the system. For many years I held and taught that the combination of resorcin, ichthyol and mercurial ointment, which I believe I introduced into surgical practice, was the most effective remedy for the treatment of erysipelas and all similar septic infections. To-day I have found but one combination which I think superior for this purpose, and that is the silver ointment, unguentum Credé. I believe that its properties are more marked than those of the ointment, which I so long used. No matter what part of the body be anointed, absorption takes place readily and promptly; consequently any convenient surface may be medicated in this way: Cleanse the skin thoroughly, smear the ointment freely over the surface, cover the area with oiled silk, and put over this, if comforting to the patient, a warm application to promote absorption. If the surface be not tender, the ointment may be rubbed in. In cases of puerperal sepsis it may be applied over the abdomen or to the inside of the thighs. In erysipelas it should be applied to the affected part.

Lastly, I would speak of the use of lactate and citrate of silver, not only for such purposes as the preparation of catgut, silk, gauze, etc., but in solutions of from 1 to 300 to 1 to 500 for the irrigation of septic cavities, and for such purposes as washing out the peritoneal cavity in cases of tuberculous peritonitis, for which I have repeatedly used it, and always with benefit.

In my own experience in several instances, a flushing of

that cavity with a 1 to 500 solution has been of the greatest apparent benefit and has never occasioned any regret. Infected bladders, uterine cavities and vaginas may be advantageously, freely and frequently washed out with similar solutions. When using then one may have the feeling that he is using solutions of greater efficacy and of far less toxicity than any of the mercurial preparations would afford. Therein lies the beauty of these preparations, that in anything like equal strength they are more effective and much less toxic than the mercurial salts.

I often state in my clinic that the good old-fashioned nitrate of silver is not used nearly so much as it should be, and prove the strength of my conviction by its general use in 1 to 10 per cent. solutions in pus cavities. Not only is a full germicidal effect obtained but also that stimulation to healthy granulation which the nitrate is well known to afford. All in all, if I could have but one source for antiseptic solutions and applications, I would rather look toward the preparations of silver than in any other direction.—*Buffalo Medical Journal.*

OPERATIVE RELIEF FOR HOARSENESS.

Hoarseness and weakness of the voice due to hypertrophy of the normally small mass of lymphoid tissue in the glossoepiglottic fossa, and known as the lingual tonsil, is of so common an occurrence in those patients who use their voices for public singing and speaking, and it is so frequently overlooked even by specialists, that I can not refrain from giving this abnormality brief consideration.

It is only ten years since these hypertrophies have been recognized as productive of definite symptoms. In sixty cases on my record books, I find that all the patients complained of a desire to clear the throat; twenty-five per cent. of sensations of a lump in the throat, and fifty per cent. of weakness and hoarseness on prolonged use of the voice in speaking and singing. These hypertrophies can be easily recognized, and as easily removed by means of a guillotine devised for this purpose. The use of astringents, caustic acids, and the actual cautery are, as a rule, in my experience, not of much value compared with excision.—*N. E. Med. Gazette.*

ICHTHYOL IN PUERPERAL SEPSIS.

MacPherson has treated five cases of puerperal fever, with brilliant success, by means of ichthyol. Two methods of using the drug were employed. Three patients had the uterus packed at intervals with gauze saturated with dilute ich thyol. Two of the patients had equal parts of ichthyol and glycerine, in one drachm quantities, injected into the uterus. The author sums up the results he has obtained as follows: "The remarkable results which have followed the use of ichthyol in these five cases, three of which where desperate ones, have led me to believe that it is a valuable remedy in this dangerous disease. The objection may be made that the packing had as much to do with the patient's improved condition as the ichthyol, but in two of the cases reported no packing was used, and the drug was simply injected into the uterine cavity after free irrigation. I am aware that at least one case of severe depression following the application of ichthyol to the cavity of the uterus has been reported. But no such untoward symptoms appeared in any of the cases here mentioned. However, all these patients were being well stimulated with strychnine and ammonium carbonate at the time. Instead of any unpleasant symptoms arising, exactly the opposite were observed; in fact, the drug acted like a specific. Not only were the pulse and temperature reduced, rigours ceased and discharge lessened, but patients had a feeling of well-being following the use of ichthyol, which was a pleasant contrast to the appearance of mental and physical suffering which one often witnesses in these cases."—*New York Medical Journal.*

BANDAGING.

When bandaging a limb where there may be a possibility of swelling, it is well to remember that the reverse spiral is more elastic, and will stretch more than the simple spiral, and that the figure of eight bandage is still more elastic than the reverse spiral.—*International Journal of Surgery.*

TREATMENT OF HEMATOMATA WITH OLIVE OIL. ANTISEPSIS OF THE MOUTH.

Dr. Camescasse advises the application of olive oil in all cases of contusions and hematomata. No rubbing is necessary—it is indeed painful and therefore to be avoided—but the oil is simply sprinkled on or applied on lint. If the skin is broken a previous cleansing with some antiseptic is advisable. The mode of action of the remedy is not clear, but the rapidity and effectiveness of its action are said to be remarkable. A black eye thus treated disappeared so quickly and completely that the victim was inclined to complain on the ground that he had no visible injury to show to the police.—*Revue de Therapeutique.*

Therapeutic Notes.

ANTISEPSIS OF THE MOUTH.

The following combinations are recommended by Miller in the New York and Philadelphia *Medical Journal* as antiseptics for the mouth:—

℞ Acidi thymici.....gr. iij.
Acidi benzoici.....gr. xlv.
Ess. menthe pip.....*m*x.
Tinct. eucalypti.....ʒivss.
Alcoholis.....ʒiij.

M. Sig.: Put a sufficient amount in the glass of water to render the water milky and use as a mouthwash; or:—

℞ Acidi tannici.....ʒiij.
Menthol.....ʒij
Thymol.....gr. xv.
Tinct. benzoini,.....ʒiss.
Alcoholis.....ʒiij.

M. Sig: Ten drops in half a glass of tepid water.—*Journal of the American Medical Assoc.*

Jottings.

FOR PRICKLY HEAT.

Clinical Medicine suggests, since prickly heat is caused by the irritation from perspiration which cannot readily evaporate, that it will be found better to resort to soap and water, used frequently, and to avoid alcoholic and alkaline washes. Once a day, perhaps, the irritated parts should be gently bathed, then dried thoroughly, and afterward anointed with cocoanut-oil, which is absorbed readily, and should be applied with the hand. It is not greasy, and will not soil the clothing unless an excessive quantity is used.

BUTTERMILK LOCALLY IN BROMIDE ACNE.

Prof. Antony Roche (*Lancet*, No. 4138) refers to the use of buttermilk as a local application in the acnelike eruptions produced by the internal administration of the bromides. As is well known, the addition of small doses of arsenic frequently lessens the amount of rash, but not in all cases; besides, the continual exhibition of small doses of arsenic has obvious drawbacks. The author has tried many of the local applications that have been recommended, but without material benefit. For some time past he has suggested to his patients the washing of the face night and morning in buttermilk, instead of water, and he has been surprised at the good this simple application has done in nearly all the cases.

It is claimed that one drop of chloroform on sugar, three times a day, for a month, will insure exemption from attacks of gall stone.

When there are indications of an attempt at menstruation, we should favour the attempt by giving hot drinks and hot fomentations over the abdomen.

Chloral hydrate is a superior remedy in convulsions, especially puerperal, provided the heart is not weak.

Camphor dissolved in turpentine will check the flow of milk in the mammary glands.

Stubborn bed sores will yield to the alternate application of hot and cold poultices.

In nephritis we should avoid meats and advise milk and warm clothing.

For sweating feet use a one per cent. permanganate of potassium in water.

In sudden suppression of the menses from chill, tincture of aconite, one-half drop every hour, is recommended.

THE
CANADA MEDICAL RECORD

PUBLISHED MONTHLY.

Subscription Price, $1.00 per annum in advance. Single Copies, 10 cents.

Make all Cheques or P.O. Money Orders for subscription, or advertising, payable to JOHN LOVELL & SON, 23 St. Nicholas Street, Montreal, to whom all business communications should be addressed.

All communications for the Journal, books for review, and exchanges, should be addressed to the Editor, Box 2174, Post Office Montreal.

Editorial.

IMPOSING ON MEDICAL MEN.

In view of the general tendency to impose on medical men, especially in view of the greater difficulty the profession is having every year to earn a living, it is of interest to note an instance in which the medical men of St. John, New Brunswick, successfully resisted this attempt to legally saddle them with an important duty without providing any remuneration for their time and trouble. Here follows the clipping :—

REPORTING DEATHS IN NEW BRUNSWICK.

The following clipping from the St. John *Telegraph*, Wednesday, 6th Jan., 1904, is worthy of record :

To the Editor of The Telegraph :

SIR,—Some few weeks ago a number of physicians were summoned before the police magistrate for not reporting births that had occurred in their practice. Believing the Act under which it was attempted to prosecute them to be

unjust and an unwarrantable interference with their liberty, and especially with the confidential relationship which they hold with their patients, they determined to oppose the prosecutions and fight the matter through. The following letter from Dr. L. A. Currey, who was retained as their counsel, gives the result of the action taken:

"In the Police Court of the City of St. John.

"The King, on the information of John B. Jones *v.* Murray MacLaren and certain other medical practitioners in the city of St. John.

"DEAR SIR,—I hereby beg to notify you that the information in the above matter, and all other informations against medical practitioners in the City of St. John, laid under and by virtue of the Vital Statistics Act of the Legislature of the Province of New Brunswick, have been withdrawn by the prosecutor and are at an end, and that it is not necessary for you to further attend the hearing of the above or any of the other informations either personally or by counsel.

"The action of the prosecution in the withdrawal of said information was not brought about by any request or otherwise on the part of your counsel, but was the voluntary act of the prosecutor, and for reasons best known to himself or those who represent him.

"I attended at the return of the information, and at all the subsequent adjournments, either personally or by my partner, and was on each and every occasion of said adjournment ready to proceed with the defence on the grounds outlined by me to your society at the meeting held some weeks ago in your rooms.

"Should future action be taken at any time against your honourable body, I consider the same grounds of objection would be equally as available and tenable as in the present case, had they proceeded to full hearing and disposal thereof.

"I may add that the further I have carried my legal investigation and research into the validity of said Acts, the more I am convinced of their unconstitutionality, and that the sole and exclusive right to legislate with reference to vital and all other statistical matter belongs not to the local legislature, but to the Parliament of Canada.

"L. A. CURREY,

Counsel for Medical Practitioners.

"December 16th, 1903.

"To J. W. DANIEL, M.D., *Chairman.*"

From this it appears that Dr. Currey believes the whole Act to be *ultra vires* the Provincial Legislature, and, as the law officers of the Government have withdrawn the prosecution, it would appear that they must agree with that opinion.

As the physicians have been criticized in some quarters for their refusal to carry out this Act, the undersigned were appointed as a committee to give to the press some of their reasons for doing so, in order that the public may have a clearer idea of the matter than they have at present.

When this Act was first passed it did not compel physicians to report, although they were mentioned, and it was unnecessary for us to take action. Last winter, however, Mr. John B. Jones obtained an amendment compelling physicians to report to him with a number of details, within five days of its occurence, every birth attended by them, and under a penalty not exceeding $20 or imprisonment in the county jail.

Some physicians did make returns and had to undergo the humiliation of finding a number of their patients in the police court to answer a charge of neglecting to register births, and the charge was to be proved on the evidence of the physician!

In other words, the physician was made a spy and informer on his patients, and that under a heavy penalty. From the physician's standpoint such an Act is most abhorrent, destroying at once the confidential relationship existing between physicians and patient, and making them (the physicians) unwilling perjurers in breaking the oath they took on graduation to preserve inviolate all information coming to them through the necessary confidences of their patients. This is our great objection. We also object to being made statistical officers without our knowledge or consent and without remuneration.

That Mr. John B. Jones should be able to get an Act passed by the Legislature exploiting the gratuitous services of the whole medical profession of the county to collect statistics and, incidentally, to assist him materially in making a living, without others being consulted in any way, is a circumstance that requires a fuller explanation than has yet been given.

We believe that no class of citizens in the community is more law-abiding and more honourable in its dealings than the physicians; no other class of persons has ever been compelled to do professional work for the public for nothing, and penalized for neglect; we are tired of legislation of this kind and think it is time it was stopped.

The objections taken to the Act by our counsel, Dr. L. A. Currey, may be summarized as follows:

1. The Act under which these prosecutions were brought are *ultra vires* to provincial legislatures.

2. The gratuitous duty imposed on medical practitioners by said Act is repugnant to natural justice, and is not of such a public nature as authorizes the legislature to impose the same.

3. The above Act requires (*a*) medical practitioners to become informants on their patients, and renders the latter

liable to a penalty; (*b*) to violate their professional oaths in making a public record of facts which are often of a delicate and confidential character; (*c*) to perform gratuitous services for which another receives remuneration.

Yours truly,

THOMAS WALKER, M.D.

J. W. DANIEL, M.D.

St. John, N.B., 2nd January, 1904.

But this is only one of many injustices and impositions which are placed upon us. While visiting Portland, Maine, some time ago, we were surprised to learn that the directors of the Public Hospital had opened a large number of private wards, to which they admitted patients paying as high as five dollars a day, but whom the medical and surgical staff were compelled against their will to attend and operate upon without any remuneration whatever. We were told by one of the senior members of the staff that wealthy patients frequently came to his private office, paid five dollars for a consultation, and, when informed that a very difficult operation would be necessary,coolly told the doctor that he would postpone it until this particular surgeon came on duty at the Public Hospital, when he would take a private room at five dollars a day and have the operation for nothing. The doctor said that he had to grin and bear this injustice or else be put out of the position as chief surgeon of the hospital. This shows how a small injustice in the beginning may gradually grow to be a very serious one in the end. The beginning of this trouble was in allowing laymen to have a majority on the board, so that the opinion of the medical staff no longer carried any weight. The doctors of Montreal practicing in Westmount have had to submit to a similar injustice as was tried ineffectually in St. John. That progressive municipality decided that it was advisable to

be informed of every birth and of every case of contagious disease occurring within its limits; but, instead of fining the father and mother or some member of the family, the Council passed a by-law saddling the attending doctor with this task. We have no doubt that the action of Westmount was illegal, and we would advise the next doctor who is prosecuted to bring his case before the Medical Society, of Montreal, which should engage a lawyer to defend him. There are many other injustices such as doing charity work for insurance companies of which we may speak later.

A. L. S.

X-RAY PRIZE ESSAYS.

Believing that the further development of X-rays is of great importance to Surgery and Medicine and the human race, and to encourage research and disseminate the knowledge gained, the Illustrated Review of *Physiologic Therapeutics*, 19 East 16th Street, New York, offers the sum of fifteen hundred dollars in cash prizes for the best Essays on X-rays in medicine and surgery, the first prize being $1,000. All surgeons, physicians and hospitals interested in any branch of X-ray work should write to the Illustrated Review of *Physiologic Therapeutics*, 19 East 16th Street, New York City, for information concerning title, time allowed, conditions, etc.

AN IDEAL CITY WATER SUPPLY.

The water supply of Montreal and the adjacent town of Westmount have of late been the subject of much controversy and criticism. The former city, early last fall, found its water of a milky colour and containing much sediment.

Investigation proved that this was due to a very considerable landslide which had taken place on the banks of the river Lieber, a tributary of the Ottawa river, from which Montreal draws its supply. This condition still exists, though in a lesser degree. If there is anything which a water drinker desires, and which he should have, is that his beverage should be clear, limpid and contain a small proportion of air. The murmurings of the citizens of Montreal were loud, for its charges for that necessary fluid are far beyond that of any other city on this continent. At a much less rate other cities are supplied with water which is prepared by filtration and is thus prevented being the means of carrying broadcast the seeds of disease. A recent analysis of the water supply of Montreal showed that though it it did contain a large amount of organic matter, there was no evidence of the presence of bacteria of a character to produce disease; on the contrary, the water supplied to Westmount was found to contain a large number of intestinal bacteria, evidently obtained from Verdun sewerage, which discharges not far from the place where the intake is situated for Westmount water. The result of this was that a small epidemic of typhoid fever broke out in that town. Its cessation was brought about by boiling the water, by those who continued to use the town supply, while many hundreds resorted to the use of Laurentian water, supplied by the Laurentian Spring Water Company. Although, so far, the City of Montreal can, since the establishment of the present water works in the early fifties of last century—show a pretty clean bill, yet it would be folly to expect such a condition to continue. Montreal is rapidly increasing, and the population of the old city is very dense. Towns above her on the river are also increasing, and the danger of sewerage contamination is year by year becoming more possible. Now is the time when the city must look this matter squarely in the face. The remedy lies in

filtration, and sand filtration is, we believe, the best and, at the same time, the cheapest. Our comparatively near neighbour, Albany, a few years ago, established such a plant, and the result was almost marvellous. In tyhoid fever especially was this the case, a reduction from a previous yearly average of 84 deaths to 39 and later data show a still larger decrease. This was due to filtering the water supply. The towns above Albany had for years been sending its sewage down into the water which supplies that city, but now, thanks to filtration, not into the bowels of Albany people. Surely no expense is too great to accomplish such a result, for—viewed from a financial stand—filtration, from typhoid fever alone saved Albany from a loss of $45,000. When the reduced death rate from other disease is taken into consideration it is estimated that during the first year filtration was in existence in Albany, the reduced death rate saved that city from a financial loss of $444, and this saving is steadily increasing. Another method of obtaining an ideal water is by obtaining a ground supply. Such water coming from springs or from large underground streams is, of course, filtered water according to nature's process. It is clear, sparkling and free from tastes and odours. It is also free of sewage polution, and, therefore, of those germs capable of transmitting typhoid fever. Unfortunately, geological conditions are not such that large cities can, as a rule, secure near at hand such a ground supply. Where conditions are favourable, communities are indeed fortunate, as they secure filtered water which is stored in an underground reservoir, and which is sufficiently cool for ordinary drinking purposes, even during the summer months. Illustrative of the improvement in the health of a city changing from a polluted river water to a ground water supply, we may mention the case of Lowell, Mass. When its supply was taken from the Merrimack river, the death rate from typhoid fever ranged from 195 to 84 yearly per 100,000 inhabitants. The annual death rate

is only 20, now that a driven well water supply has been substituted. There are sometimes difficulties met with in a ground water supply. Thus the water may be excessively hard, and unfit for household use, which difficulty is met with individually by a large expenditure of soap—or collectively by the erection of a plant—which softens the entire supply. In many places in Great Britain this is done and the city of Winnipeg has such a plant, which, we are informed, is satisfactorily solving this difficulty. We hear that in several places similar plants are being installed.

This question is one of immense importance to all cities. It stands at the very top of all hygienic measures, and the sooner our City Council realizes that every death is an unnecessary loss of capital—the sooner they will set to work to give to Montreal an ideal water supply.

WHY USE SPECTACLES?

A recent number of the New York Medical Times says :—"With most persons there is an epoch in life when the eyes become slightly flattened, says *Health*. It arises, probably, from a diminished activity of the secreting vessels; the consequence is that the globe is not kept quite as completely distended with fluids as in youth and middle age. There is thus an elongated axis of vision. A book is held further off to be read; finally, becoming more flattened by the same inactivity within, the difficulty is met by putting on convex glasses; this is the waning vision of man. If, however, when that advancing imperfection is first realized, the individual persists in the attempt to keep the book in the old focus of vision, even if he reads under the perplexing disadvantages, never relaxing, but perseveringly, proceeding just as he did when his eyes were in the meridian of their perfection, the slack vessels will at last come up to his assistance and the original focal distance will be re-established. This statement will unquestionably be combated energetically by those who use glasses; but it will be a waste of orensic power, because the fact is established beyond cavil.

We do not pretend it will be successful in every instance; but generally, if glasses are once resorted to, then the opportunity of doing good without them is forever lost. Very aged men may be noticed reading fine print; and ladies, too, by scores who resisted glasses at the age of life referred to, who enjoy all the comforts of distinct vision; and they will, until, like the chaise, every stick in the vehicle falls to pieces at the same time. Therefore, begin with a firm resolution never to use glasses of any kind for reading or writing. The ancients knew nothing about such contrivances; if they had there would have been poor eyes in abundance and occulists to meet the emergency. Cicero never complained of imperfect vision at the age of sixty-three years; he even wrote his last letter by torchlight on the eve of being put to death by the waiting soldiers. Humboldt died at ninety-two, having never been embarrassed by any kind of glasses. John Q. Adams, illustrious for scholarship, at a ripe old age saw without them. Indeed, it would be no laborious enterprise to collect a catalogue of names in the chronicle of literary fame of men and women who were independent of glasses; and just to see the thousands of young men and women ruining their eyes because it is fashionable to wear them!"

Personal.

Dr. Von Eberts has resigned the position of Registrar of the Medical Faculty of McGill University after holding the office for about a year. Dr. John W. Scane has succeeded Dr. Von Eberts.

Dr. James Stewart, Professor of Medicine in McGill University, has, we are glad to say, recovered from the very serious attack of septicemia, which kept him confined to the Royal Victoria Hospital for several months. He has gone to Egypt, where he will pass the winter so as to thoroughly recuperate.

Book Reviews.

Progressive Medicine. A quarterly digest of advances, discoveries and improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, assisted by H. R. M. Landis, Assistant Physician to the Medical Dispensary of the Jefferson Medical College. Vol. IV., December, 1903. Diseases of the Digestive Tract and allied organs; Liver, Pancreas and Peritoneum, Anesthetics, Fractures, Dislocations, Amputations, Surgery of the Extremities and Orthopedics, Genito-Urinary diseases. Diseases of the Kidneys, Physiology, Hygiene, Practical Therapeutic, Referendum. Lea Brothers & Co., Philadelphia and New York, 1903.

This number of Progressive Medicine is as full of interesting matter as an egg is full of meat. There is not an uninteresting or unimportant paper to be found between its covers. The introductory article on the stomach is one which older physiologists will read, we think, with some doubt and will question some of the assertions. The pivot on which this paper depends is the discovery of a new enzyme in gastric secretion—a specific ferment *chymoze*, which does not digest food, but which accelerates the action of the ferments of the pancreatic secretion. We quote the following: "Many of the older authors, beginning with Beaumont, believe the mechanical irritation of the foods cause the gastric secretion * * * experiments in Palous laboratory, have proved the fallacy of this view. In the first place if the secretion was due to simple mechanical irritation there is no reason why irritation with the point of a glass rod * * * should not cause the secretion." If we are not mistaken this is just what did occur when Beaumont experimented on St. Martin. In the case of this man, the introduction of a gum elastic catheter through the wound in his stomach caused gastric juice to trickle down its side. The subject is too large to be treated in a brief review, but in the light of recent discoveries, this article should be thoughtfully read. The article on anesthesia brings the subject up to date. We quote the following: "The most interesting and, should it prove successful, the most important, is the production of general narcosis by the hypodermic injection of a combination of morphine and scopolamine and the addition of adrenalin to cocaine for local anesthesia." The subject of spinal anesthesia is dismissed with the following sentence: "Nothing important has been added to our knowledge."

We quote again: "The tendency in the selection of a general anesthetic by those who formerly used chloroform is toward ether, while the advocates of ether, although they still adhere to it as the anesthetic of choice, are beginning to select chloroform in certain cases. Recent communications impress me that combinations of ether and chloroform are yielding results which demand recognition." This gives an idea, although a faint one, of the value of the articles in this volume and we once more advise our readers to add it to their purchasing list for 1904.

F. W. C.

Wathen's Epitome of Histology. A Manual for Students and Physicians. By John R. Watnen, A.M., M.D., Professor of Surgery, etc., formerly Professor of Histology and Pathology, Kentucky School of Medicine, Louisville, Ky. 12mo, 220 pages, 114 illustrations. Cloth, $1.00, net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1903.

This little work consists of a compact teaching manual. It contains a vast amount of information which is not often met with in books of its size. The subject of "Embryology" deserves special mention, which is at once clear and concise. The illustrations have evidently been chosen for their practical value in aiding text rather than for their pictorial beauty, the intention being to show to the eye what could be only imperfectly described in words. The printing and binding are good.

G. H.

How to Attract and Hold an Audience. A popular treatise on the nature, preparation and delivery of public discourse, by J. Berg Esenweir, A.M., Lit. D., Professor of the English Language and Literature in the Pennsylvania Military College. Hinds & Noble, 31 West 15th Street, New York, 1903. Price $1.00 postpaid.

This a book of nearly two hundred and seventy-five pages, which could be beneficial to a very large degree if in the hands of all medical men who desire to become decent public speakers. While certain men are born orators, yet with practice and instruction such as this book affords, it is possible for all to succeed and become proficient. We read every one of its pages with great interest, and felt when the last page was closed that its perusal was well worth the time we had given it. Medical men as a rule are poor speakers—some painfully poor speakers. These can find in this book their salvation.

F. W. C.

The Practical Care of the Baby. By Theron Wendell Kilmer, M.D. Associate Professor of Diseases of Children in the New York School of Clinical Medicine; Assistant Physician to the Out-Patient Department of the Babies' Hospital, New York; Attending Physician to the Children's Department of the West Side German Dispensary. New York. 12mo. Pages xiv-158, with 68 illustrations. Extra Cloth, $1.00, net, delivered. Philadelphia, F. A. Davis Company, 1914-16 Cherry Street, Publishers.

The general practitioner is far too frequently indifferent to the baby, as any old woman is able to care for the baby. To-day the up-to-date modern practitioner is nearly as much interested in the welfare of the baby as the mother. To be intelligently interested he must have practical knowledge of the subject. There are few courses in college or hospitals in which a practical knowledge of the subject is given. This small work is the most practical and useful volume we have seen on the subject, whether for the physician or the young mother. We endorse it most heartily and will make it a text-book for nurses in the Women's Hospital.

H. L. R.